

***Shipping Instructions for Samples Collected from Individuals
Potentially
Exposed to Chemical Terrorism Agents***

Chemical Terrorism Kit (Red) Materials Provided (Unit #23)

- Biohazard specimen bags (100)
- Forensic evidence tape (1 roll)
- Package strapping tape (1 roll)
- MDCH chain of custody forms (serves as test requisition) (20)
- Shipping Instructions (this document)

Specimen Packaging Kit (Box) Materials Provided (Unit #22)

- Absorbent material (10 squares)
- Foam racks to hold blood tubes (3)
- Cold-paks for blood samples (4)
- One shipping container* large enough for specimens, absorbent material, and cold packs (1)
- One shipping container* large enough for specimens, absorbent material, and dry ice (1)
- Appropriate labels: UN 3373, UN 1845, class 9 hazard label, to/from and responsible party labels, and orientation arrows (2 Ea)
- Large zipper bags (1)
- Secondary Packaging (Tyvek & Plastic) (3)

Materials required but not provided

- Urine cups (25 mL) – 1 per patient
- Purple-top (EDTA) blood tubes (5-7 mL) – 3 per patient
- Green-top OR Gray-top blood tubes (5-7 mL) - 1 per patient
- Blank (empty) urine cups for each lot number used (2)
- Blank (empty) blood tubes for each lot number used (2)
- Dry ice for urine samples (not large chunks)
- Padding- (blue hospital pads or newspaper)

* If shipping by air, an IATA-compliant container including leak-proof secondary packaging and an outer container that meets regulations

Specimen Collection Instructions

Label all specimens with labels generated by your facility. Labels may include

- patient name
- age or DOB
- identifying number (medical record number or unique specimen identifier)
- date / time of collection
- collector's initials
- ordering physician

1. Urine specimens - collect for each patient (child or adult):

- 25 mL urine
- Seal with evidence tape. Mark with collector's initials, ½ on tape and ½ on cup
- Freeze as soon as possible

2. Blood specimens - collect for Adult patients only*

- **three** purple-top EDTA tubes (5-7 mL)
 - **unopened** allow to vacuum fill only
 - **Number tubes** in order of draw (#1, #2, #3)
- **one** gray-top **OR** green-top tube (5-7 mL)
 - **Draw purple-tops first!**
 - **unopened** - allow to vacuum fill only
- Seal with evidence tape around stopper. (Do not cover patient identifying label).
- Mark with collector's initials ½ on tape and ½ on tube.

*unless directed otherwise by CDC or MDCH

3. In addition to patient specimens, please include Blank cups and tubes – sealed with evidence tape:

- two empty, unopened urine cups from each lot number used for patients
- two empty, unopened purple-top tubes from each lot number used for patients
- two empty, unopened gray- or green-top tubes from each lot number used for patients

4. Complete MDCH Chain of custody forms (8 patients per page)

Specimen Packaging Instructions

Outer containers

Use Styrofoam-insulated corrugated fiberboard outer containers (may be available from your transfusion service or send-outs department). **Do not ship frozen urine cups and blood tubes in the same package.**

Blood

To facilitate processing, package blood tubes so that similar tubes are packaged together (e.g., all purple-tops together) and not mixed (i.e., purple-tops and green/gray-tops in the same package).

Place collected and labeled blood samples (tops wrapped with evidence tape and initialed) into the styrofoam rack (to provide stability during shipment).

Wrap the rack containing the tubes with absorbent material (i.e., blue hospital pads or newspaper) and secure with tape. Use enough absorbent material to absorb the entire contents of the primary receptacles (i.e., the blood tubes). Place the packaged tubes in a large zipper bag. Seal bag with evidence tape and initial.

Urine

Please package frozen urine cups individually. Wrap each cup with enough absorbent material to contain the contents, and place in a zipper bag. Seal bag with evidence tape and initial.

OR:

Place urine cups in a gridded box. Wrap box with enough absorbent material to contain liquid contents, and seal inside a leak-proof plastic bag. Seal bag with evidence tape and initial.

Packaging sample s for shipment by commercial carrier:

Packaging must comply with current regulations (Department of Transportation, IATA) and must consist of three components: a leak-proof primary receptacle (blood tubes or urine cups), leak-proof secondary packaging (materials for protecting primary containers, and absorbent material) and an outer container (Styrofoam-insulated corrugated, fiberboard container).

Unless otherwise directed, pack and ship these specimens as "Diagnostic Specimens", "Clinical Specimens" or "Biological Substance, Category B" *. (Use IATA packing instruction 650).

*All three are considered proper shipping names until 2007.

Blood tubes—Ship at 4 °C

- Place additional absorbent material in the bottom of the outer container for cushioning.
- Add a layer of frozen cold packs.
- Place secondary containers on top of the cold packs.
- Place additional cold packs or absorbent material between the secondary containers to reduce their movement within the outer container.
- Place a layer of frozen cold packs on top of the secondary containers.

Urine cups—Ship to ensure specimens will remain frozen or will freeze while in transport

- Place additional absorbent material in the bottom of the outer container for cushioning.
- Add a layer of dry ice. **Note:** Pellet-type dry ice is preferred. Large chunks have the potential for shattering urine cups during transport, while flaked dry ice may not keep the specimens frozen long enough during shipment.
- Place additional absorbent material between wrapped urine cups to reduce their movement within the outer container.
- Add an additional layer of dry ice.

All Packages:

- Be sure the primary containers are aligned (as much as possible) in the same direction as the orientation arrows on the outer packaging.
- Secure outer packaging tops and bottoms with filamentous shipping/strapping tape.
- Label with shipper's (from-you) address and consignee's (to-MDCH) address.
- Label with "responsible party" including a phone number.
- Affix labels and markings adjacent to the shipper's/consignee's address label:
 - UN 3373 diamond marking on the outer package.
 - Label with proper shipping name, "Biological substance category B" on the outer packaging adjacent to the UN3373 marking.
 - For packages containing dry ice, place a class 9 hazard label on the same side of the outer packaging as the UN3373 marking.
 - Proper shipping name, ("dry ice" OR "carbon dioxide solid"), "UN1845", and the weight of dry ice used must be adjacent to the class 9 hazard label.

Please ship to:

**MDCH Bureau of Laboratories
Division of Chemistry & Toxicology
3350 North Martin Luther King Jr. Blvd.
Building 44 Room 155
Lansing, MI 48906
517-335-8063**

If you have any questions or problems with sample packaging or shipment, please call:

Martha Boehme, Kevin Cavanagh, PhD, Mark Knottnerus, or Jeff Dupler, MDCH Bureau of Laboratories, at 517.335.8063

After hours emergencies should be called to 517.335.9030